# PATENT SPECIFICATION



Application Date: Jan. 31, 1929. No. 3266 / 29.

Cemplete Left: Oct. 28, 1929,

Complete Accepted: Jan. 23, 1930.

### PROVISIONAL SPECIFICATION.

## A Multiple-way or Interchange Plug Cock.

ALEXANDER. Swinson, 59, Great Patrick Street, Belfast, British, do hereby declare the nature of this invention to be as follows:-

5 The invention consists of arranging the ports in the plug of a cock which has four openings in one plane in such a manner that a quarter turn of the plug inter-changes the openings.

Referring to the accompanying drawing. Passage A communicates with passage D by means of port G.

Passage C communicates with passage B

STANLEY through the hollow plug HP, and passes eet, Belaround port G, and ports E and F are 15 shut off.

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Then if plug HP be turned through 90° passage A communicates with passage B and passage C communicates with passage D, and ports G and H are shut off. 20

The apparatus may be used to inter-change the suction and delivery pipes of

an air compressor or the like.

Dated this 28th day of January, 1929. EDWD. A. S. SWINSON.

### COMPLETE SPECIFICATION.

# A Multiple-way or Interchange Plug Cock.

1, EDWARD ALEXANDER STANLEY
25 SWINSON, of 59, Great Patrick Street,
in the City of Belfast, British Subject, do
hereby declare the nature of this invention and in what manner the same is to STANLEY be performed, to be particularly described 30 and ascertained in and by the following statement :-

This invention relates to plug cocks of the type in which the plug has four openings in one plane in such a manner that a 35 turn through 90 degrees—more or less interchanges the openings and the invention consists in the construction and arrangement of such plug cocks, as hereinafter described and shown on the accom-

40 panying drawing. In the accompanying drawings Figure 1, is a view in section of the cock constructed according to this invention.

Figure 2 is a view in section of the same 45 cock showing the positions of the ports when the plug is turned through 90 degrees. In Figure 2 the pipes have a straight through connection.

Refer to drawings which illustrate the 50 construction under this invention which may be used for interchanging the suction and delivery mains of an air compressor, vacuum pump or the like connected with a tank in which either a vacuum or a pressure is required at will, or any similar 55 purpose.

Refer to Figure 2. The plug is in normal position. Passage A. communicates with passage B. through port E. Passage C. communicates with passage 60

D. through port F.

Ports G. and H. are out of action. An unobstructed and straight through passage is provided for the fluids passing.

Refer to Figure 1. The plug is turned 65 through 90 degrees. Passage A. communicates with passage D. by means of cross port H.—which is formed inside the plug round the other plug passages.

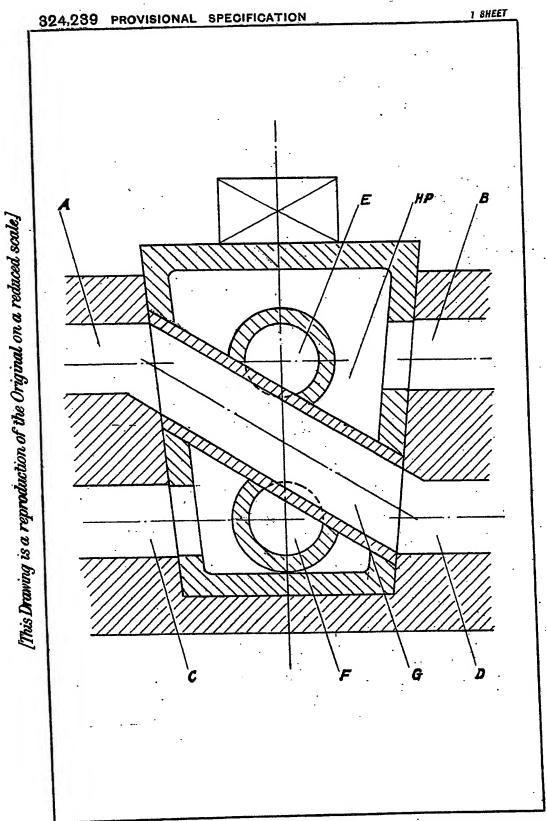
Passage C. communicates with through the straight inclined cross port G. Ports E. and F. are out of action. The

passages have been interchanged.
Having now particularly described and ascertained the nature of my said invention, and in what manner the same is to be performed, I declare that what I claim is:-

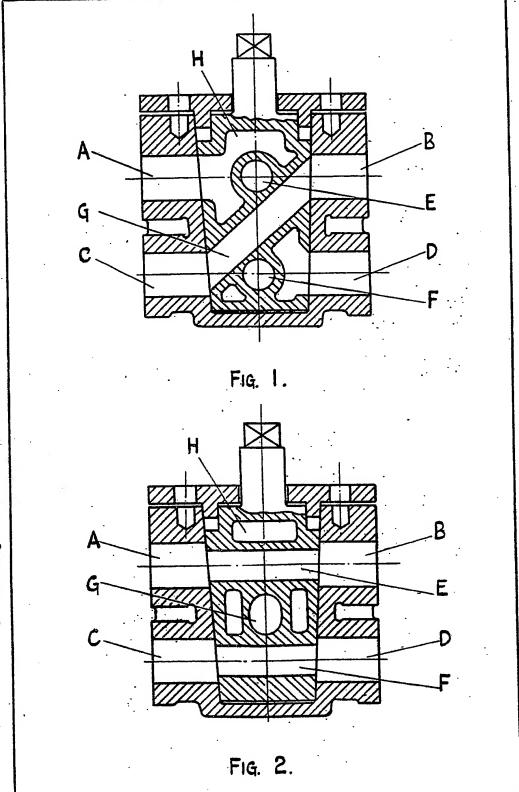
A multiple-way or interchange plug cock constructed and arranged substan-tially as hereinbefore described and illustrated in the accompanying drawing.

Dated the 20th day of October, 1929. EDWD. ALEX. S. SWINSON.

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